

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/034917

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D223/16 A61K31/55 A61P25/00 A61P3/04 A61P15/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data, BEILSTEIN Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 91/19698 A1 (SCHERING CORPORATION) 26 December 1991 (1991-12-26)  claims 1,5-7	1-26, 33-35, 41,42
A	WO 93/03015 A1 (SMITHKLINE BEECHAM CORPORATION) 18 February 1993 (1993-02-18) page 11, lines 3-14; claim 1	1-47
A	US 4 477 378 A (GOLD ET AL) 16 October 1984 (1984-10-16)  column 4, lines 43-68; claim 1	1-26, 33-35, 41,42
A	EP 0 331 130 A (NOVO INDUSTRI A/S; NOVO NORDISK A/S) 6 September 1989 (1989-09-06)  claims 1,7,8; examples 8,19,29	1-26, 33-35, 41,42
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

2 February 2005

Date of mailing of the international search report

10/02/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 03/062205 A1 (SMITHKLINE BEECHAM P.L.C; AHMED, MAHMOOD; BROMIDGE, STEVEN, MARK; FORB) 31 July 2003 (2003-07-31) page 28, lines 5-8; claims 1,13-24 -----	1-47
Y	EP 0 285 919 A (SCHERING CORPORATION) 12 October 1988 (1988-10-12) claims 1,11,12; table 6; compounds 16, 30-32 -----	1-47
P,X	WO 03/086306 A2 (ARENA PHARMACEUTICALS, INC; SMITH, JEFFREY; SMITH, BRIAN) 23 October 2003 (2003-10-23) see examples; claims 1,28-37 -----	1-47

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international application No.  
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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 25-32 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/034917

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9119698	A1	26-12-1991	AU 8201591 A IE 912031 A1 PT 97984 A ZA 9104536 A	07-01-1992 18-12-1991 31-03-1992 25-03-1992
WO 9303015	A1	18-02-1993	AU 2433092 A EP 0630372 A1 JP 6511239 T US 5639748 A	02-03-1993 28-12-1994 15-12-1994 17-06-1997
US 4477378	A	16-10-1984	US 4349472 A	14-09-1982
EP 0331130	A	06-09-1989	AT 95179 T AU 3090789 A CA 1312863 C DE 68909448 D1 DE 68909448 T2 DK 87689 A ,B, EP 0331130 A1 ES 2059592 T3 FI 890841 A ,B, IE 64247 B1 JP 1254679 A KR 126473 B1 NO 890857 A ,B, NZ 228151 A PH 26368 A PT 89887 A ,B US 5017571 A ZA 8901537 A	15-10-1993 07-09-1989 19-01-1993 04-11-1993 10-02-1994 29-09-1989 06-09-1989 16-11-1994 02-09-1989 26-07-1995 11-10-1989 24-12-1997 04-09-1989 27-08-1991 01-06-1992 10-11-1989 21-05-1991 29-11-1989
WO 03062205	A1	31-07-2003	EP 1456178 A1	15-09-2004
EP 0285919	A	12-10-1988	AT 112766 T AU 619744 B2 AU 1596488 A CA 1321195 C DE 3851769 D1 DK 652688 A ,B, EP 0285919 A1 EP 0357641 A1 FI 894566 A HU 53882 A2 IL 85855 A JP 2502723 T JP 6062574 B KR 9311489 B1 MX 9203394 A1 NO 885096 A ,B, NZ 224038 A PH 27337 A PT 87068 A ,B WO 8807526 A1 US 5015639 A US 5247080 A ZA 8802080 A	15-10-1994 06-02-1992 02-11-1988 10-08-1993 17-11-1994 23-11-1988 12-10-1988 14-03-1990 27-09-1989 28-12-1990 21-02-1993 30-08-1990 17-08-1994 08-12-1993 01-07-1992 15-11-1988 26-10-1990 08-06-1993 01-04-1988 06-10-1988 14-05-1991 21-09-1993 26-04-1989
WO 03086306	A2	23-10-2003	US 2003225057 A1	04-12-2003

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Information on patent family members

International Application No

PCT/US2004/034917

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 03086306	A2	CA 2481723 A1	23-10-2003
		EP 1411881 A2	28-04-2004
		US 2005020573 A1	27-01-2005
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